

DoD/DON Acquisition Instructions and DON Cost Estimating Standard



Naval Center for Cost Analysis

19 February 2010



Outline

- Context
 - Managing the Defense Enterprise
 - Whole of Government
- DoD Instruction 5000.02
 - Perspective
 - Update Plan
- DON Instruction 5000.2E
 - Changes
 - Status
- Cost Estimating Standard
 - Process
 - Timeline



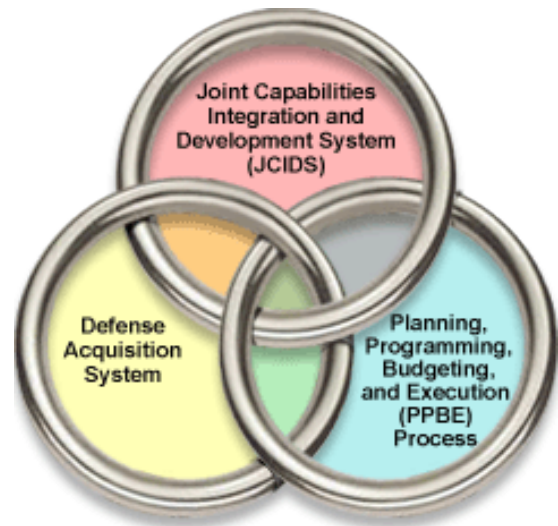
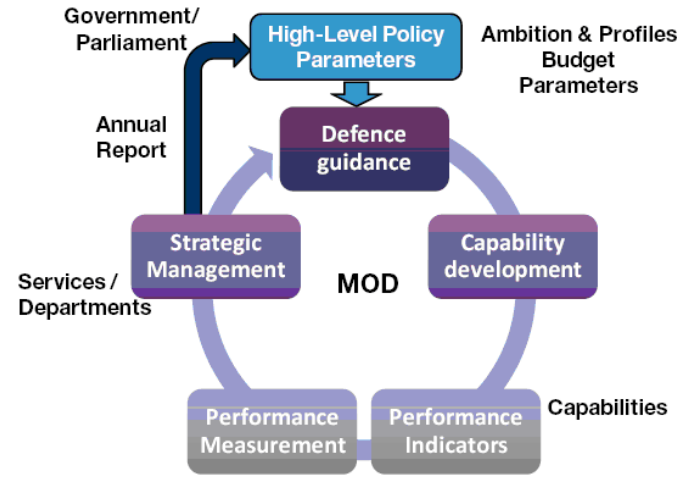
Context

- Managing the defense enterprise
 - “Canonical post-cold war”
- U.S. DoD decision support systems
 - JCIDS
 - Identification and analysis of capability requirements
 - PPBE
 - Strategic planning; program and budget development
 - Acquisition
 - Development and procurement of weapon systems and AISs

Light
↓
Heavy

Cost-Analysis Support

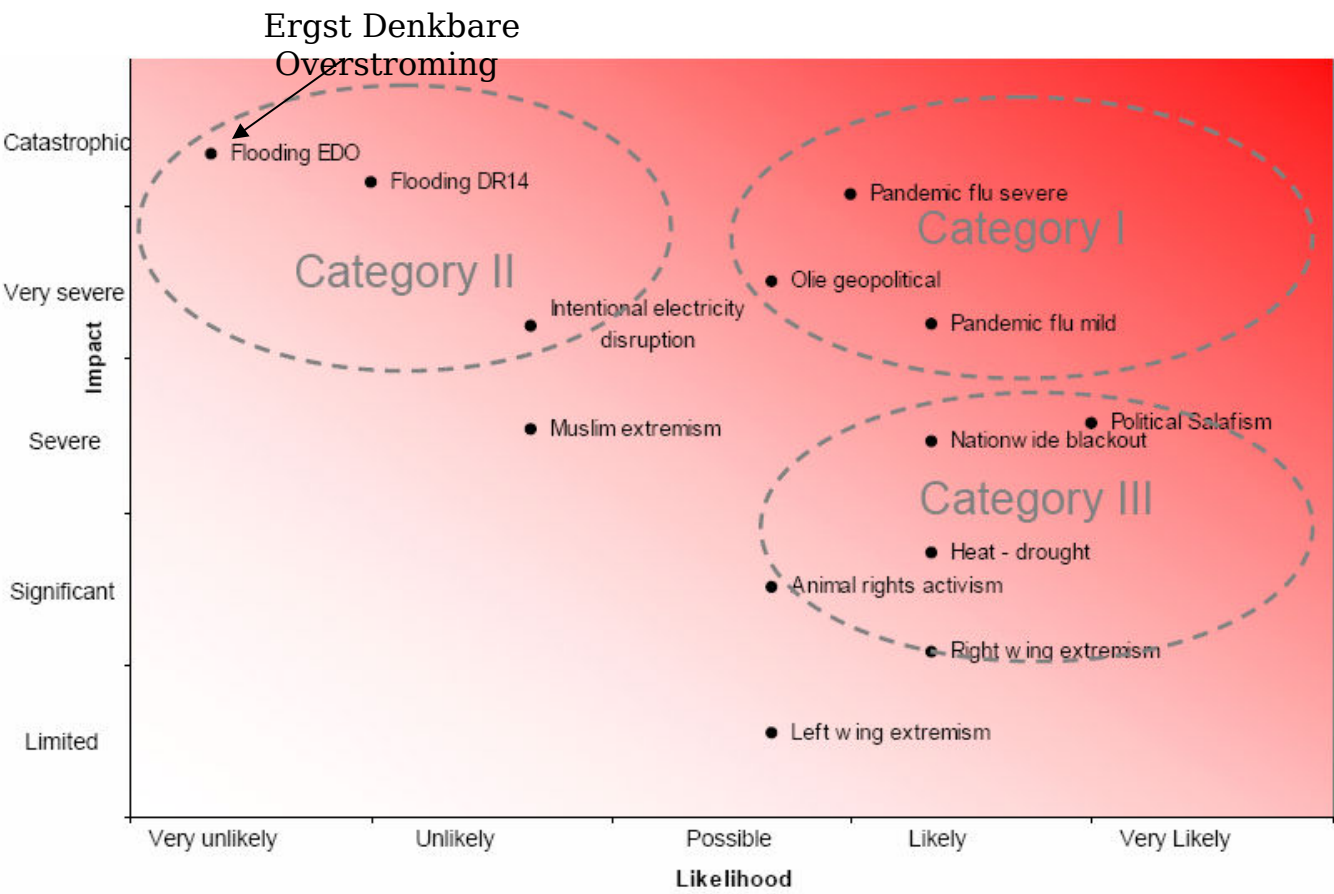
Strategic Defense Management Loop





Other Approaches

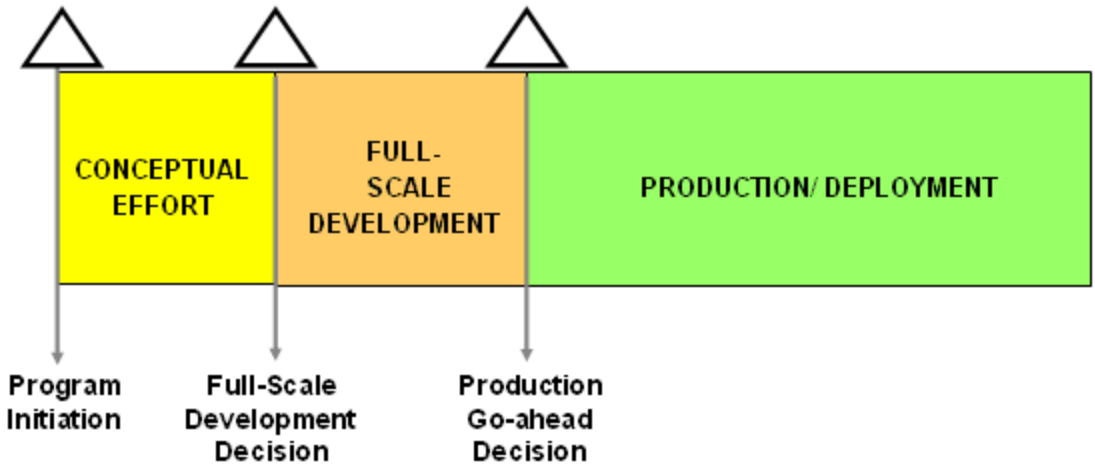
- D3
 - Defense
 - Diplomacy
 - Development
- Whole of Government
 - Netherlands
 - 2008 analysis





History

- First acquisition framework in 1971



- Decision points: 3
- Phases: 3
- Milestone documents: 1 (Decision Coordinating Paper (DCP))



The 5000 document process is iterative, two directives, a decision, a regulation, a decision, a directive an instruction, a regulation, with combined page count of as little as eight (1971) to as many as 840 (\$50M RDT&E or \$200M Procurement). Currently a directive and an instruction with 90 pages total.

Phases of the process have ranged from three (1971 to 1977) to four (1977 to 1991 & 1996 to 2000), to five (1991 & 2003 to 2008).

Program Initiation (1977 to 1985), Program Development (1985 to 1991), Milestone I (1991 to 2000), and Milestone B (2000 to 2008).

And the saga continues..., But, let us return to the beginning

CONCEPTUAL DEVELOPMENT, FULL-SCALE DEVELOPMENT, PRODUCTION/DEPLOYMENT

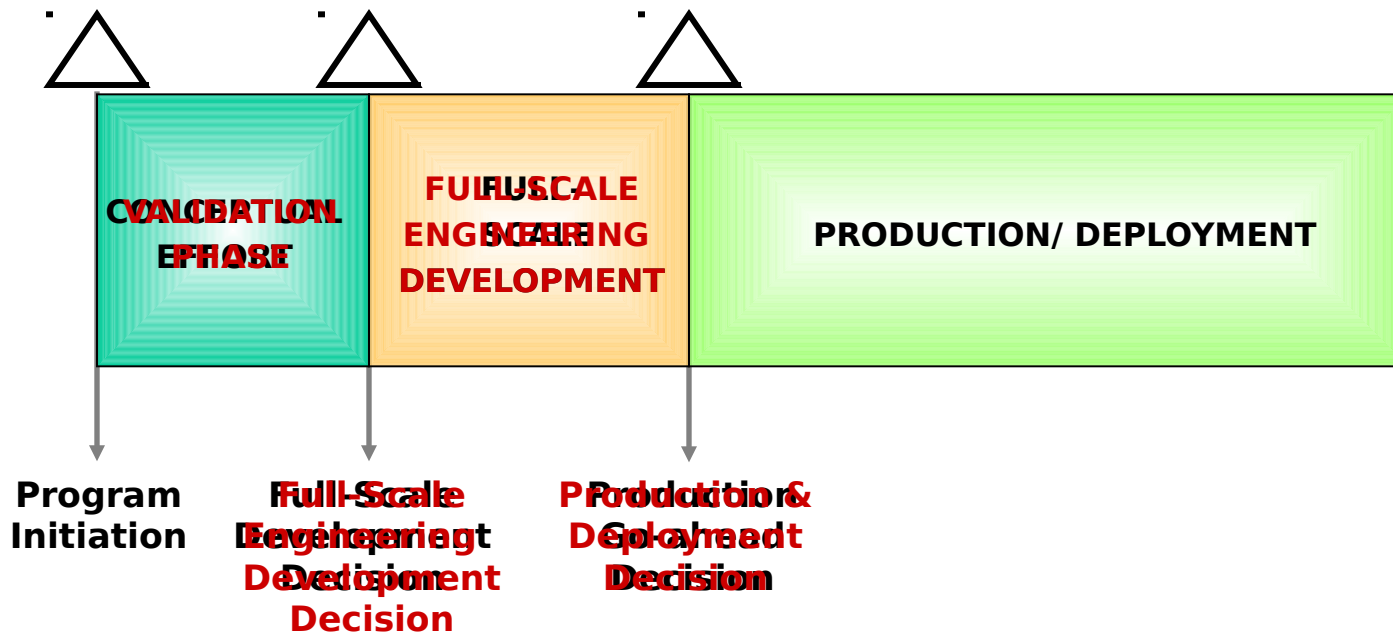
The number of milestones and other decision points requiring a DoD level review have been as few as two (1982 - 1985) and as many as seven (2008).

Initiation Decision, Development Decision, Go-ahead Decision, Production Decision

Milestone review requirements have ranged from as few as one (1971) to over 50 requirements (2008). Deputy Secretary of Defense Packard signed the first DoD Directive 5000.1 in 1971. This 8 page document created the Defense Systems Acquisition Review Council (DSARC), and The Secretary of Defense was the Milestone Decision Authority for all IDARs from 1971 to 1991. Currently, it is the USD(AT&L). The first DoD level requirements document appeared in 1977, and will be revised 14 times.

The 5000 Process

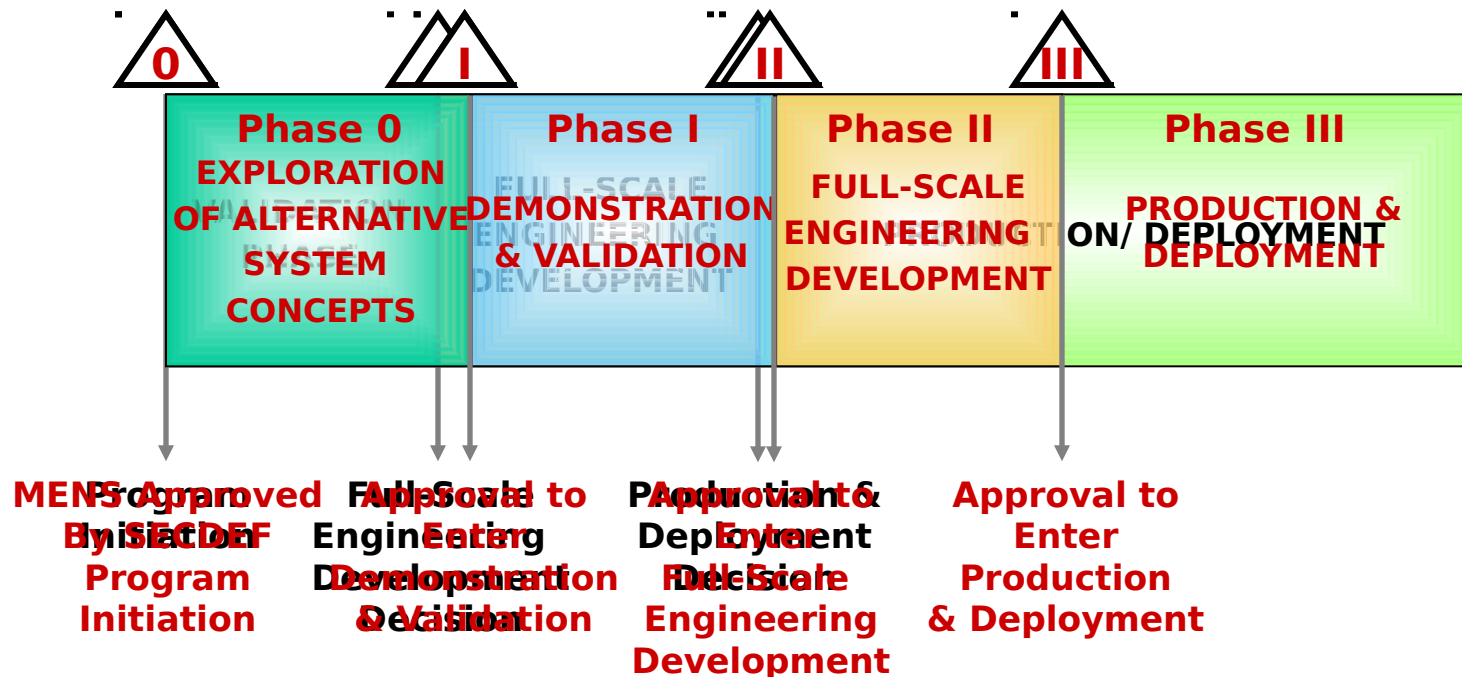
Major Programs
\$50M RDT&E or
\$200M
(1992 dollars)



- DSARC Created
- SECDEF decisions documented in approved Decision Coordinating Paper (DCP)

The 5000 Process

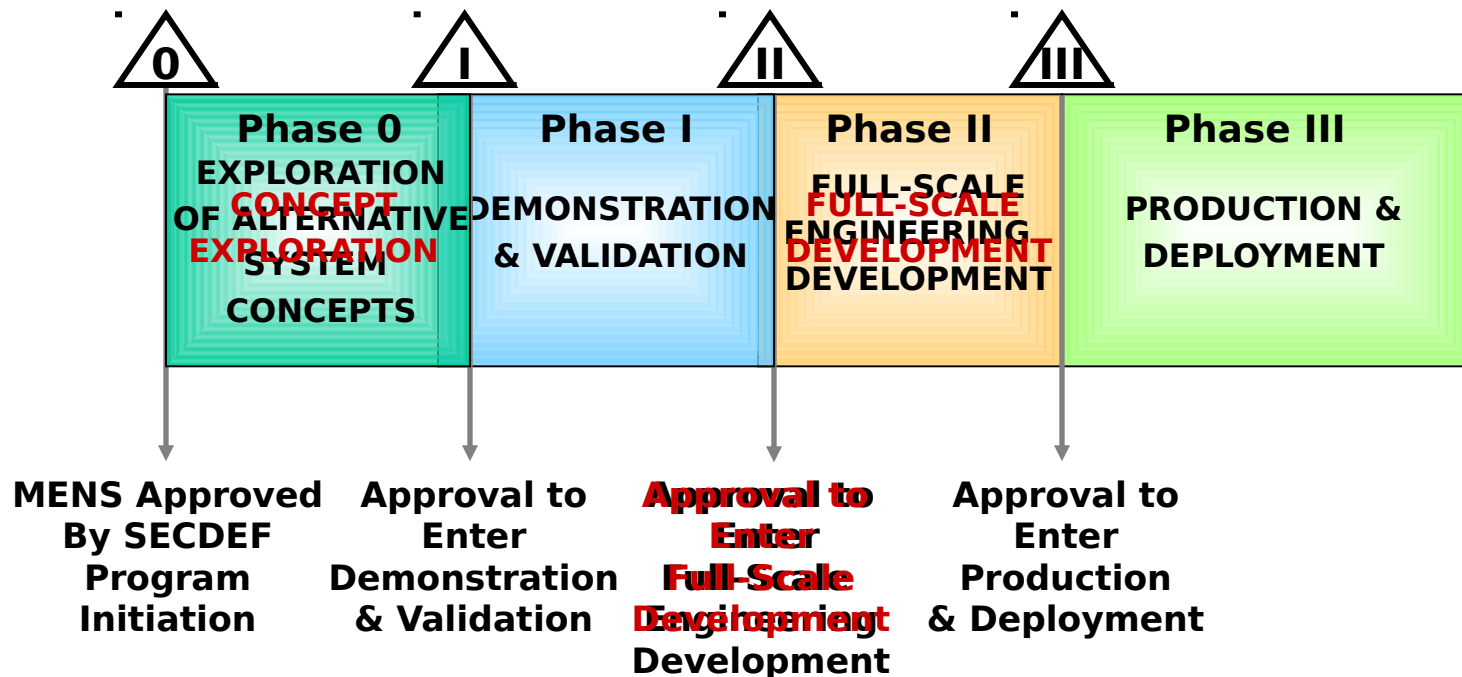
Major Programs
\$75M RDT&E or
\$300M
(FY1072 dollars)



Milestones are numbered
 Mission Element Need Statement (MENS) appears as first DoD-level requirements document

The 5000 Process

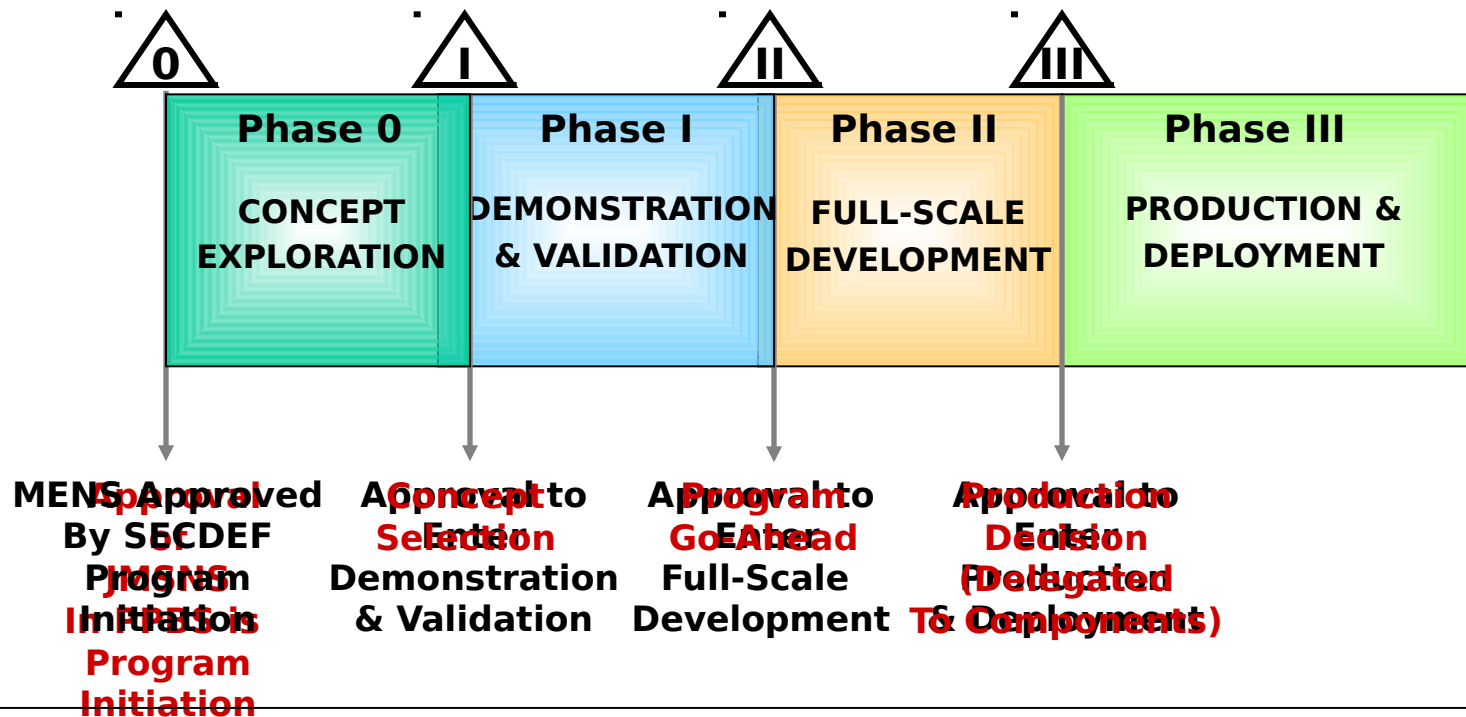
Major Programs
~~\$150M RDT&E or~~
~~\$300M~~
~~Procurement~~
 (FY1980 dollars)



SECDEF Decision Memorandum (SDDM) implemented to document milestone decisions
 Mission Element Need Statement (MENS) appears as first DoD-level requirements document

The 5000 Process

Major Programs
~~\$200M RDT&E or~~
~~\$500M Procurement~~
~~For 1980 dollars)~~



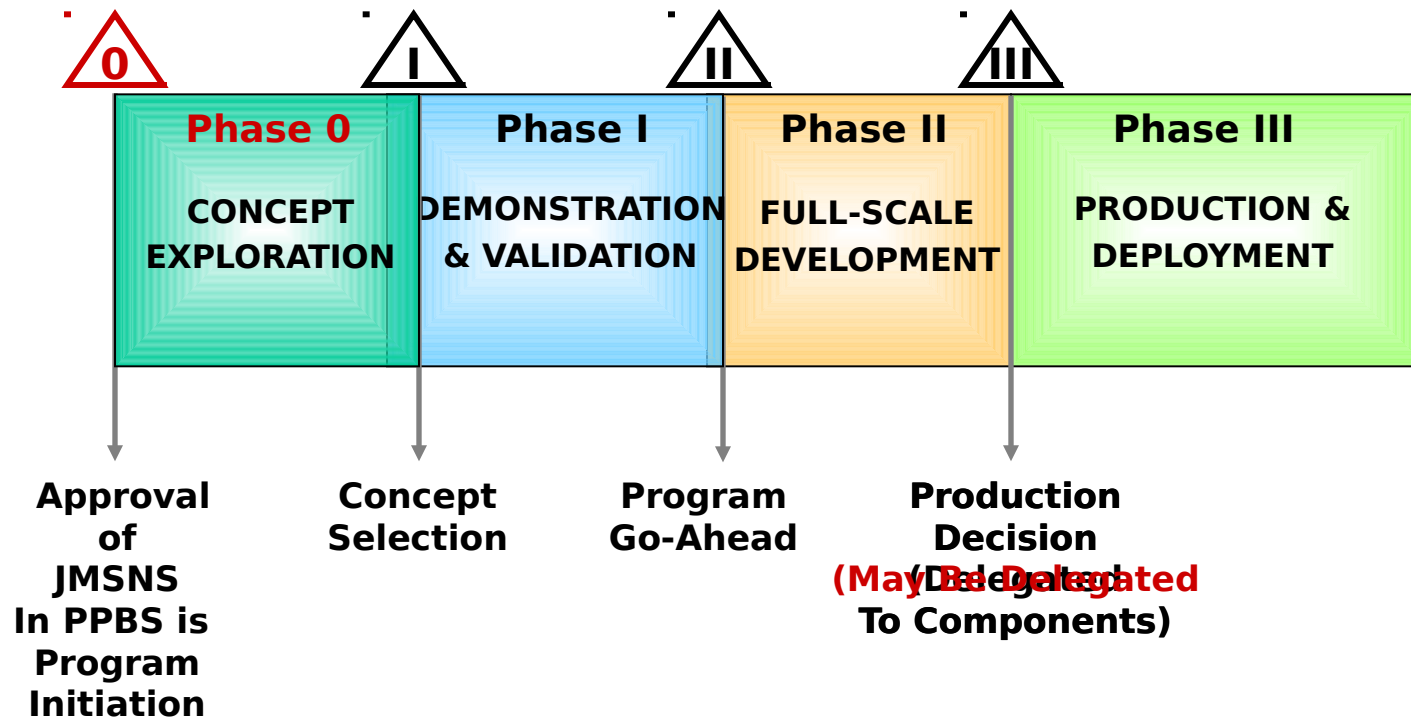
- SECDEF Decision Memorandum (SDDM) implemented to document milestone decisions
- Milestone 0 deleted
- May proceed into FSD with delayed MS II - contracts must be written so program can be terminated at least cost to government

The 5000

Process

1985

Major Programs
\$200M RDT&E or
\$1B Procurement
(FY1980 dollars)

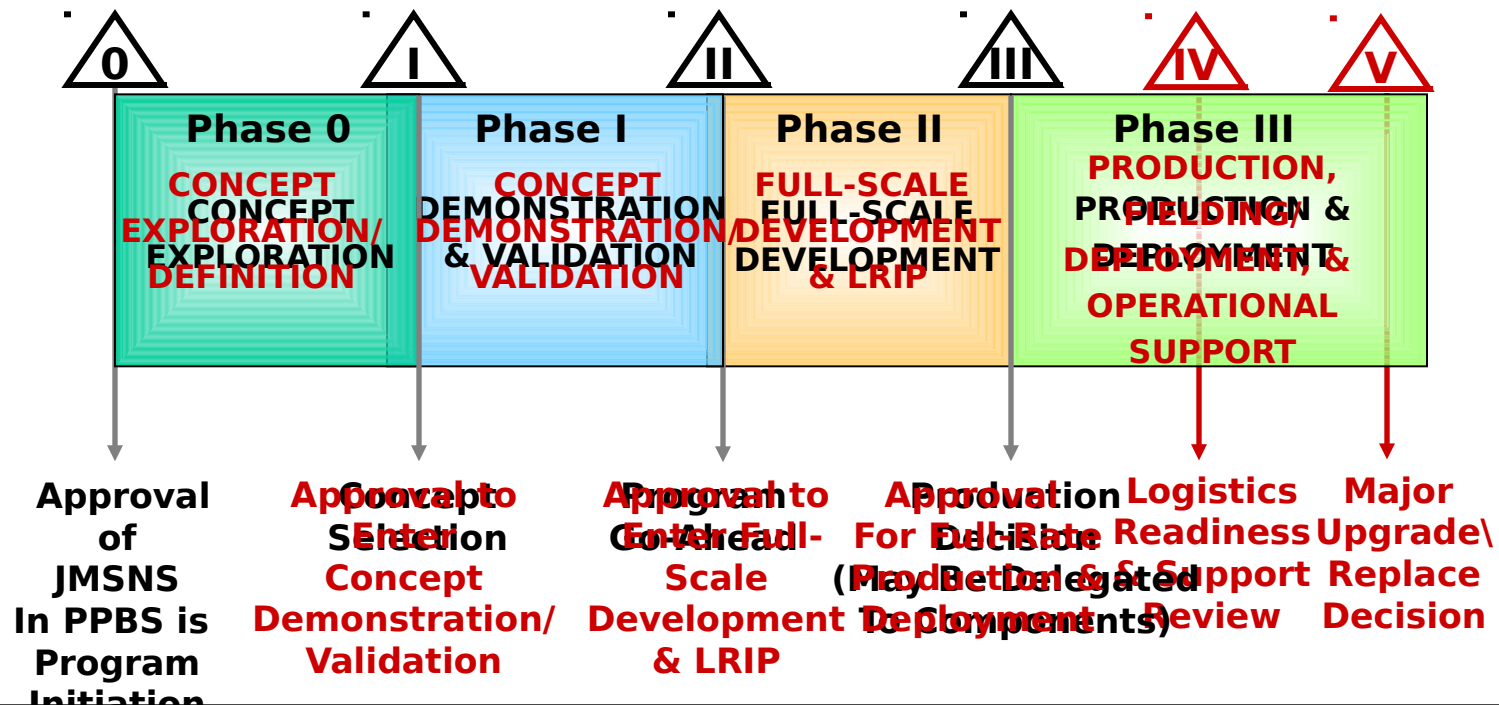


- **Milestone 0 delays**

- May proceed into FSD with delayed MS II - contracts must be written so program can be terminated at least cost to government

The 5000 Process

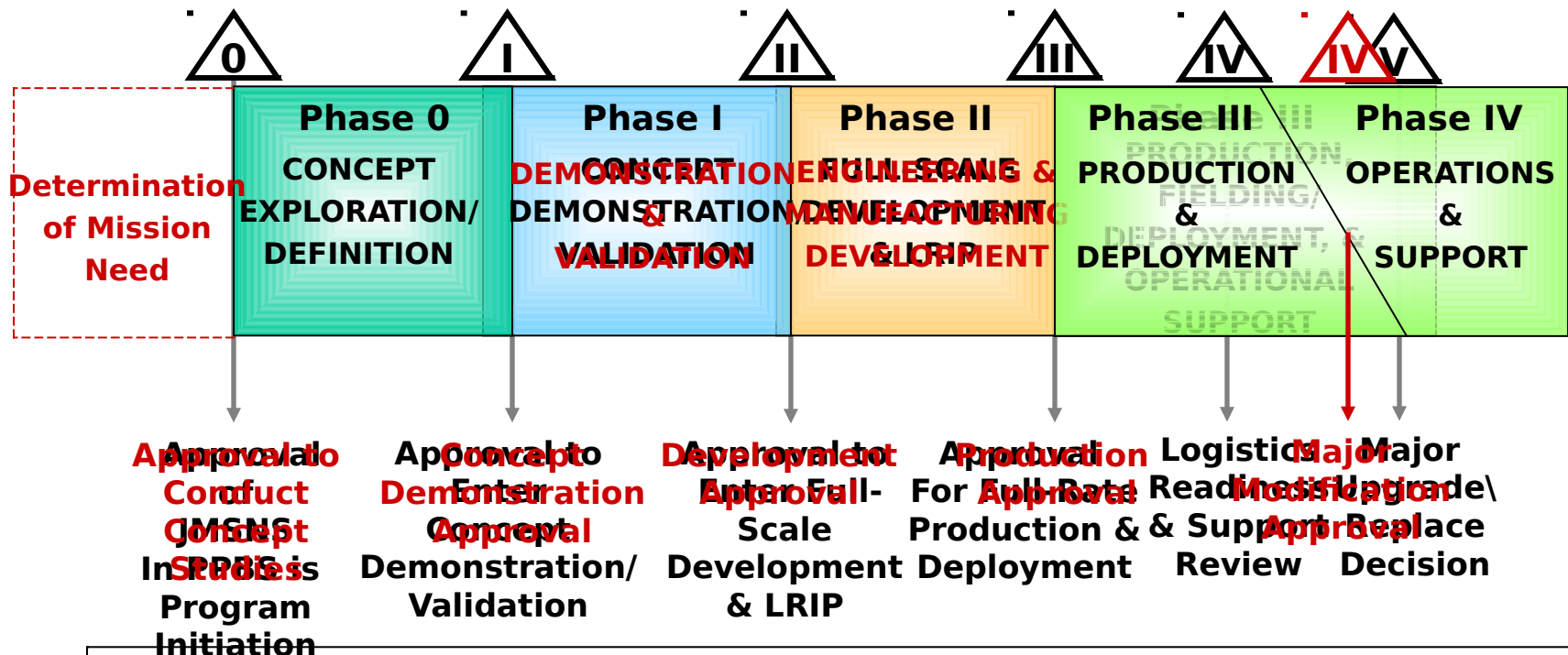
Major Programs
\$200M RDT&E or
\$1B Procurement
(FY1980 dollars)



- Joint Requirements Management Board (JRM) renamed JROC
- Milestone 0 returns
- DSARC renamed JRM; JRM renamed DAB
- Competitive Prototyping Strategy required by law and DoDI 5000.2

The 5000 Process

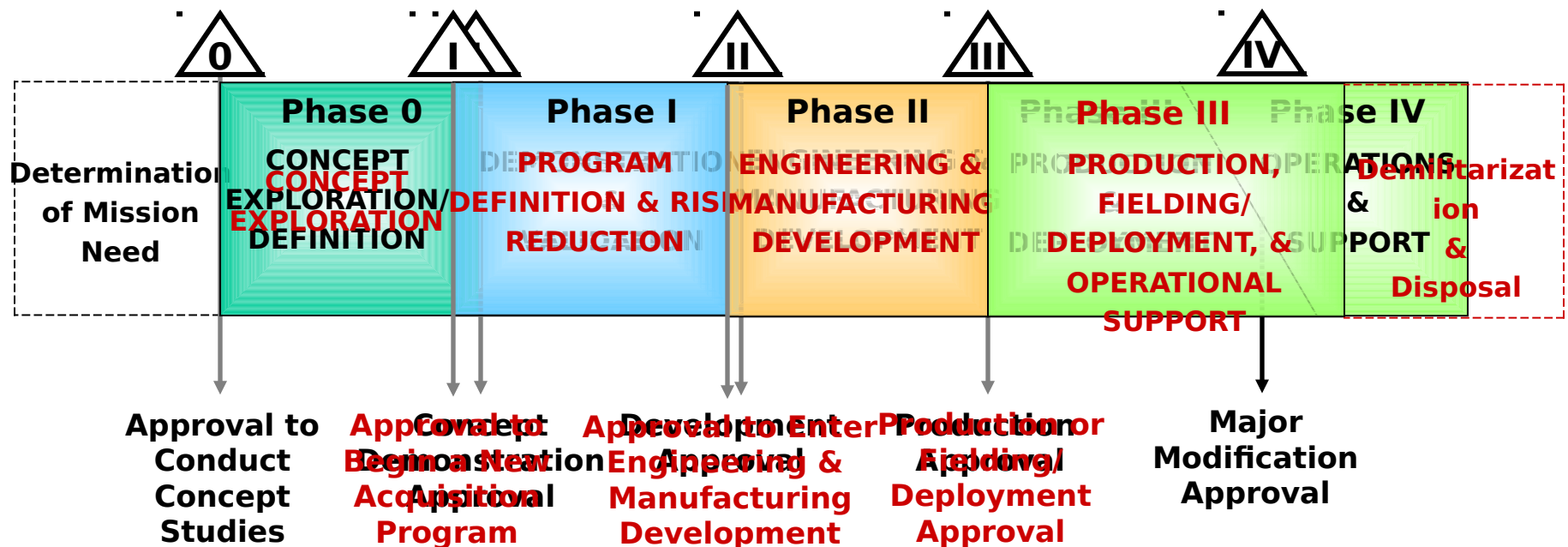
Major Programs
\$200M RDT&E or
\$1B Procurement
(FY1980 dollars)



- Joint Requirements Management Board (JRMB) renamed JROC
- DSARC renamed JRMB; JRMB renamed DAB
- Competitive Prototyping Strategy required by law and DoDI 5000.2
- JROC approved MNS replaces SECDEF approved JMSNS at MS 0
- Operational Requirements Document (ORD) appears in DoDI 5000.2, required at MS II and III

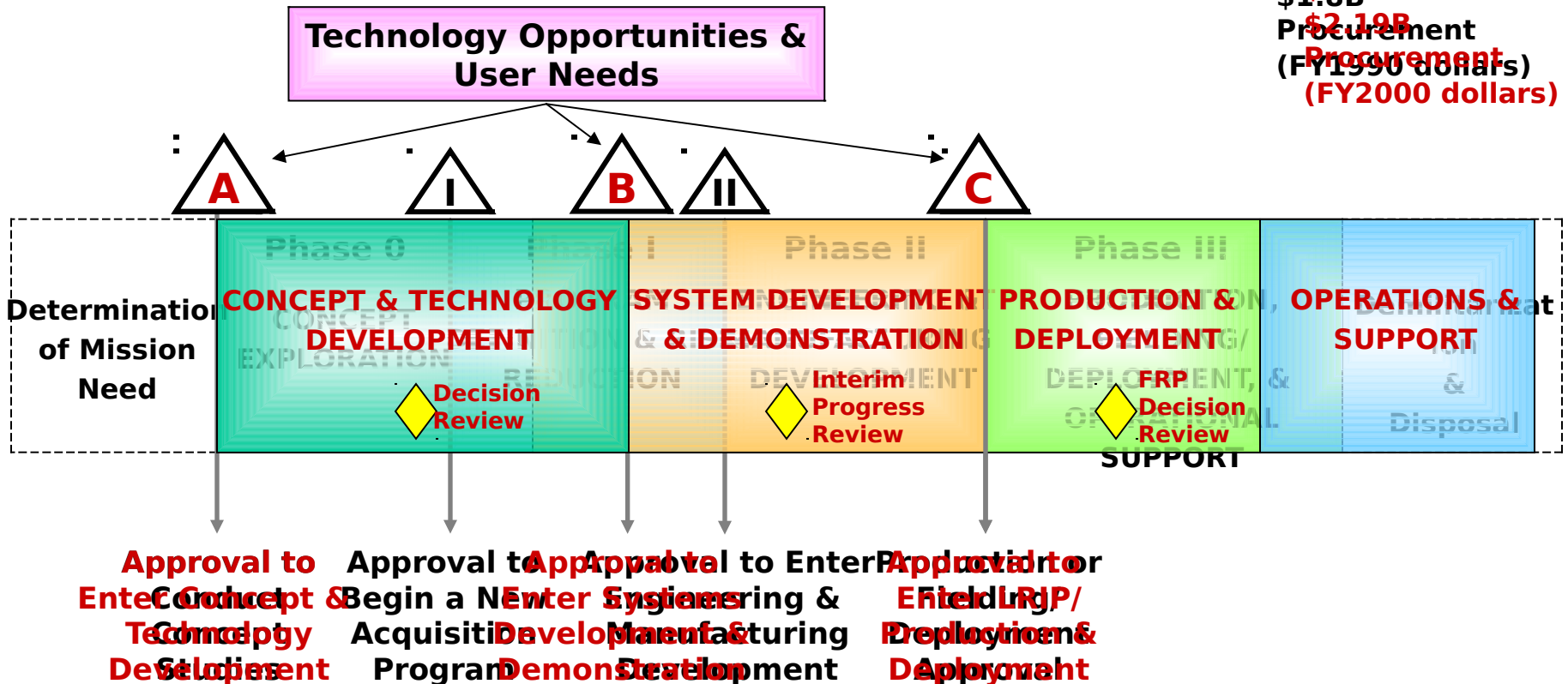
The 5000 Process

Major Programs
\$300M RDT&E or
\$1.8B
Procurement
(FY1990 dollars)



- Acquisition Decision Made at Milestone 0 (ADM) signed by USD(Acq) replaces SDDM
- All acquisition programs flow into the DoD 5000 process
- Competitive Prototyping requirement eliminated
- JROC approved MNS replaces SECDEF approved JMSNS at MS 0
- Operational Requirements Document (ORD) appears in DoDI 5000.2, required at MS II and III

The 5000 Process

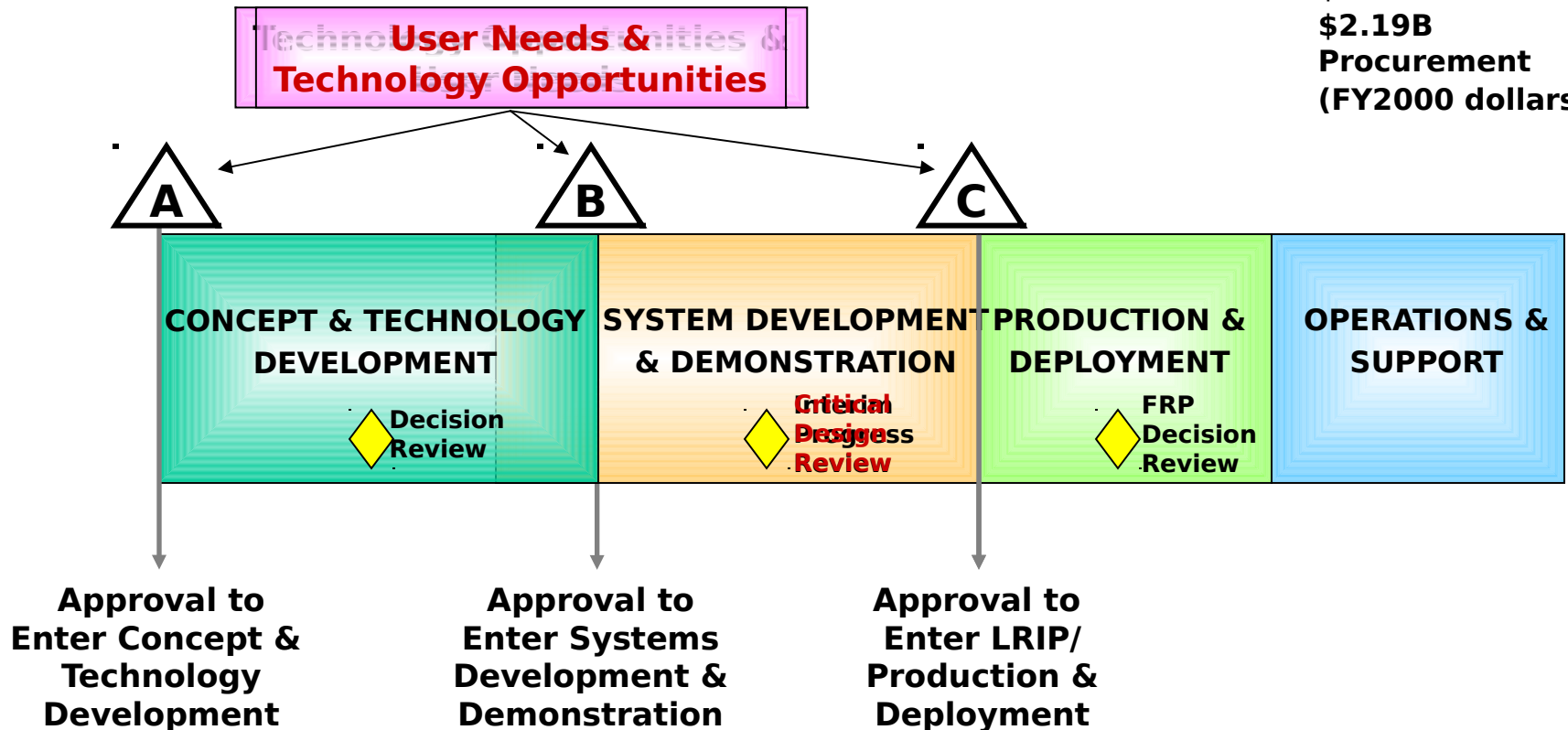


Major Programs
 \$300M RDT&E or
 \$365M RDT&E or
 \$1.8B
 \$2.19B
 Procurement
 (FY1990 dollars)
 (FY2000 dollars)

- Program Initiation at MSB to Milestone I
- All acquisition programs folded into the DoD 5000 process
- Competitive Prototyping (CP) is preferred approach

The 5000 Process

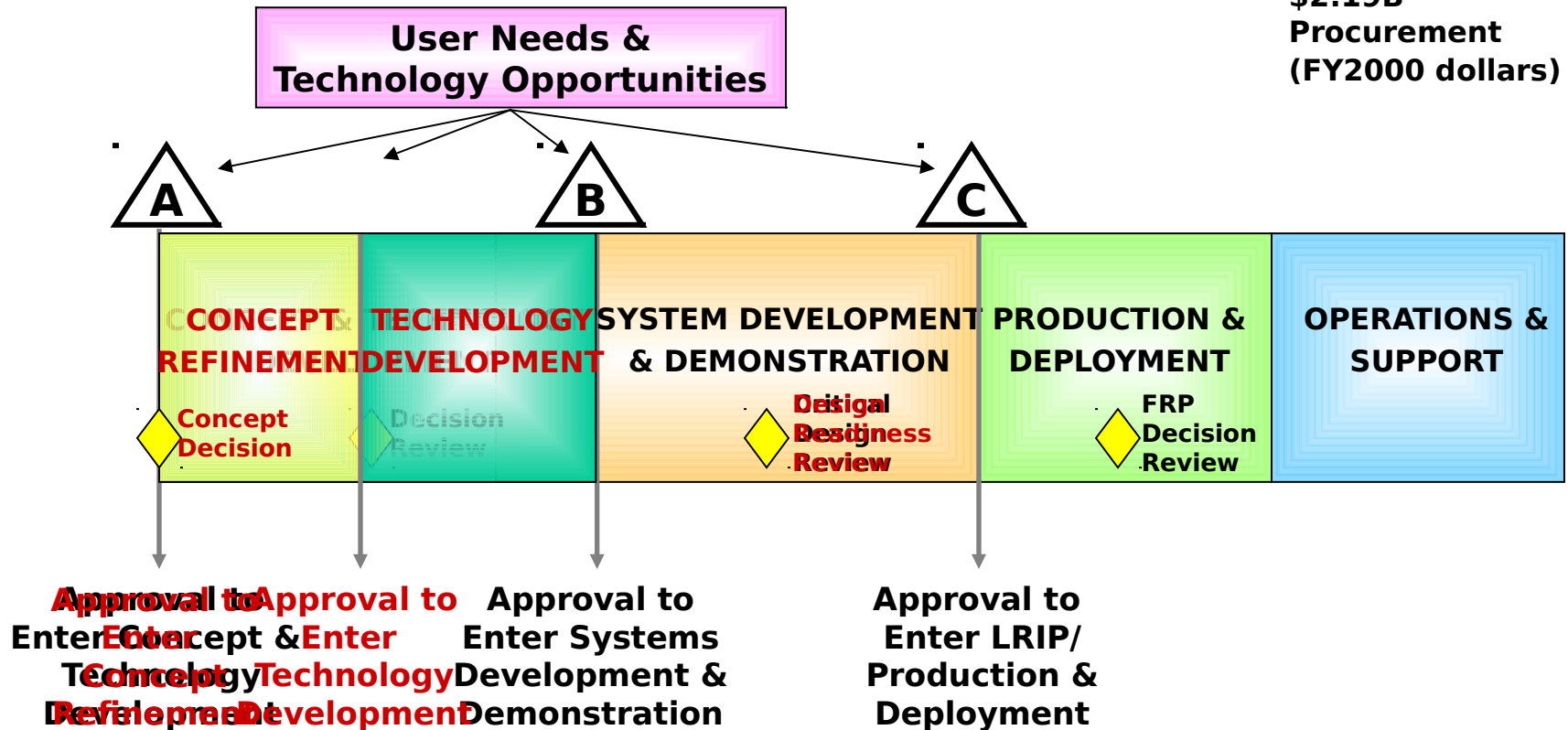
Major Programs
\$365M RDT&E or
\$2.19B
Procurement
(FY2000 dollars)



- **Program Initiation at MSB** See DoD 5000 documents
- **Commitment to Production at MS C (LRIP)**
- **Evolutionary Acquisition (EA) becomes preferred approach for implementation procedures**
- **DoD 5000.2-R becomes "Interim Defense Acquisition Guidebook"**

The 5000

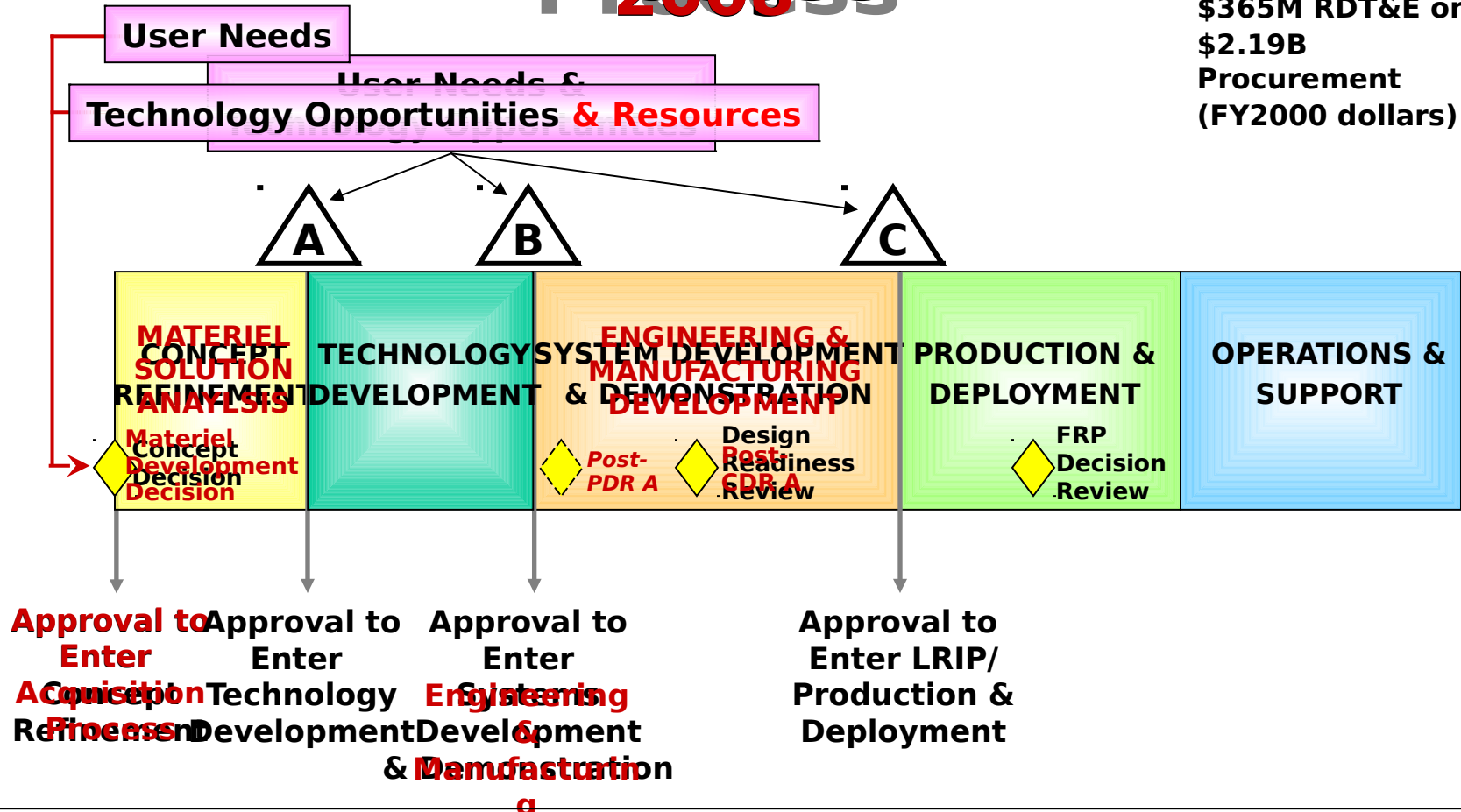
Major Programs
\$365M RDT&E or
\$2.19B
Procurement
(FY2000 dollars)



- DoD 5000 Defense Acquisition Guidebook (DoD 5000 documents
- Joint Capabilities Integration and Development (JCIDS) for basic MNS and ORP, and, "Operation of the Defense Acquisition System" for
- Implementation Procedures required prior to Concept Decision
- DoD 5000-2 becomes "Interim Defense Acquisition Guidebook"
- Capability Development Document replaced aquisition Capability Production Document at MS C

The 5000 2008 Process

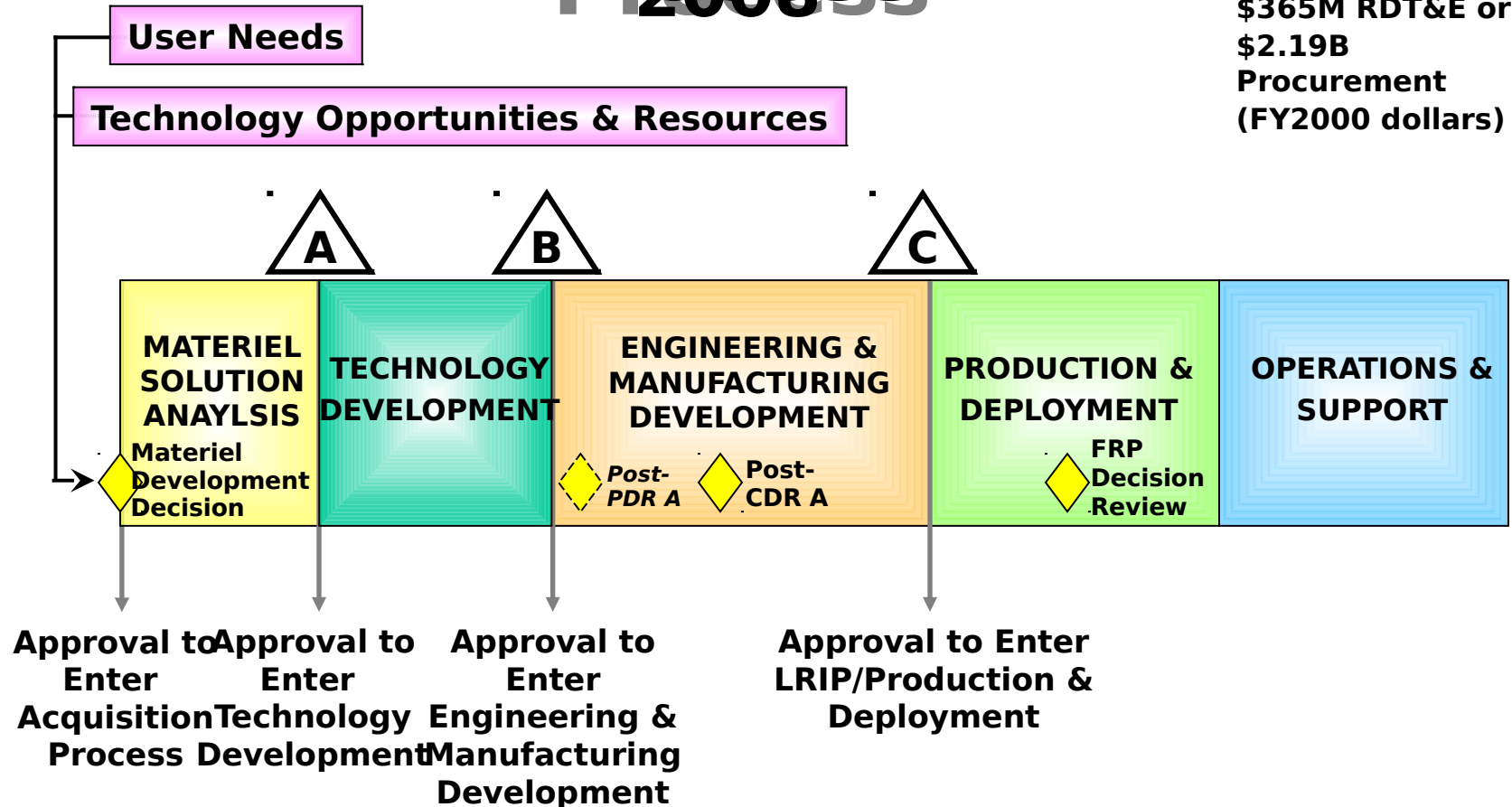
Major Programs
\$365M RDT&E or
\$2.19B
Procurement
(FY2000 dollars)



- Defense Acquisition Guidebook (DAG) comes on-line
- Joint Capabilities Integration and Development System (JCIDS) is born. MNS and ORD replaced
- Initial Capabilities Document required prior to Concept Decision
- Capability Development Document required at MS-B; Capability Production Document at MS-C
- Preliminary Design Review (PDR) after MS-B requires a Post-PDR
- Material Development Decision precedes entry into any phase of the acquisition process
- Competitive Prototyping returns; required during Technology Development Phase

The 5000 Process

Major Programs
\$365M RDT&E or
\$2.19B
Procurement
(FY2000 dollars)

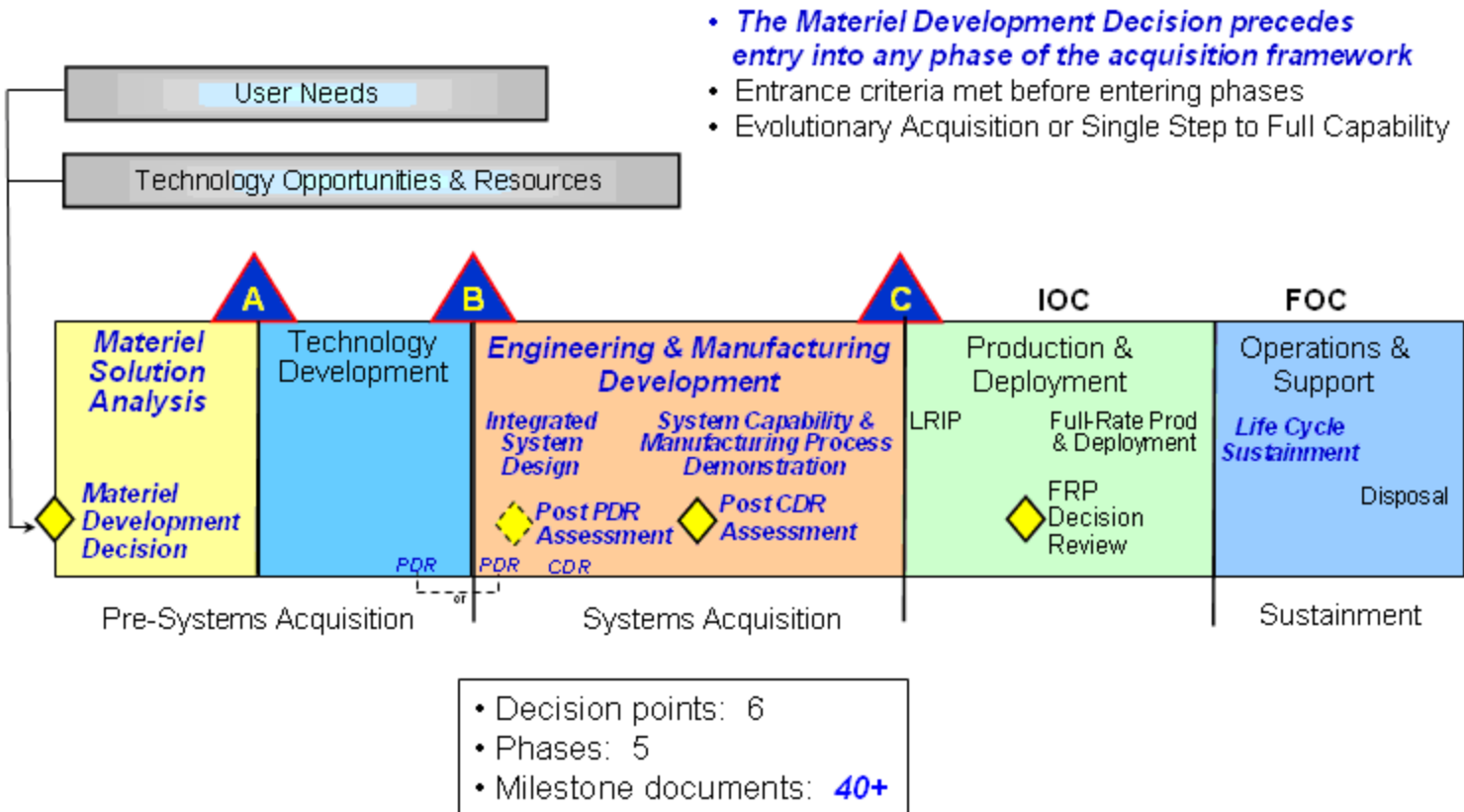


- Materiel Development Decision precedes entry into any phase of the acquisition process
- Competitive Prototyping returns; required during Technology Development Phase
- Preliminary Design Review (PDR) after MS B requires a Post-PDR Assessment by the MDA



History

- Acquisition framework in 2008

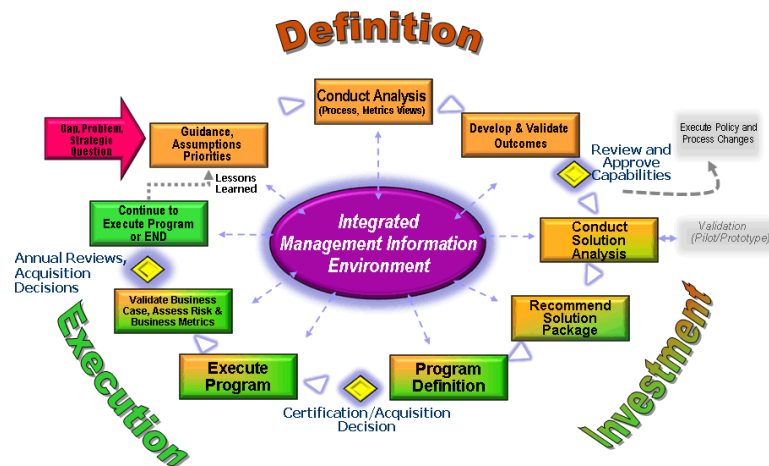




Planned Update

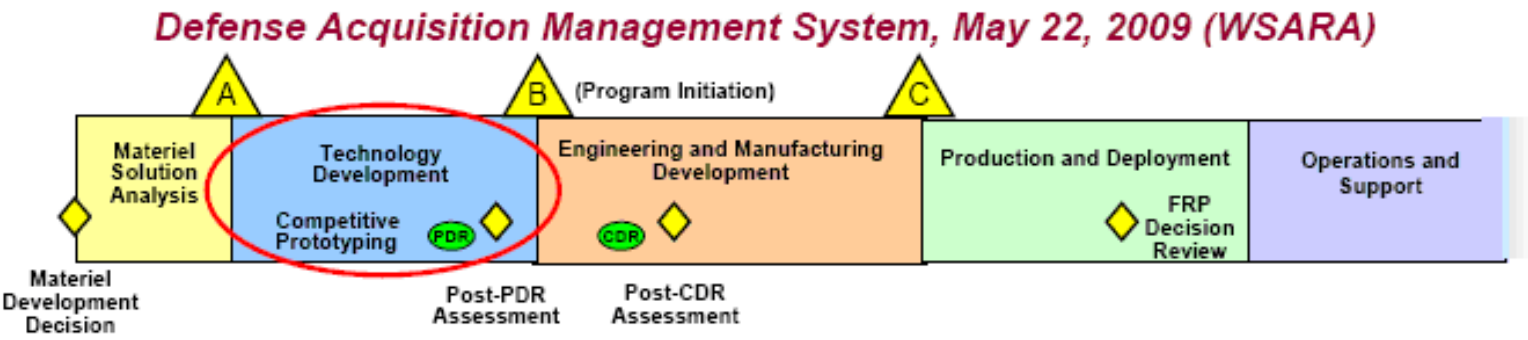
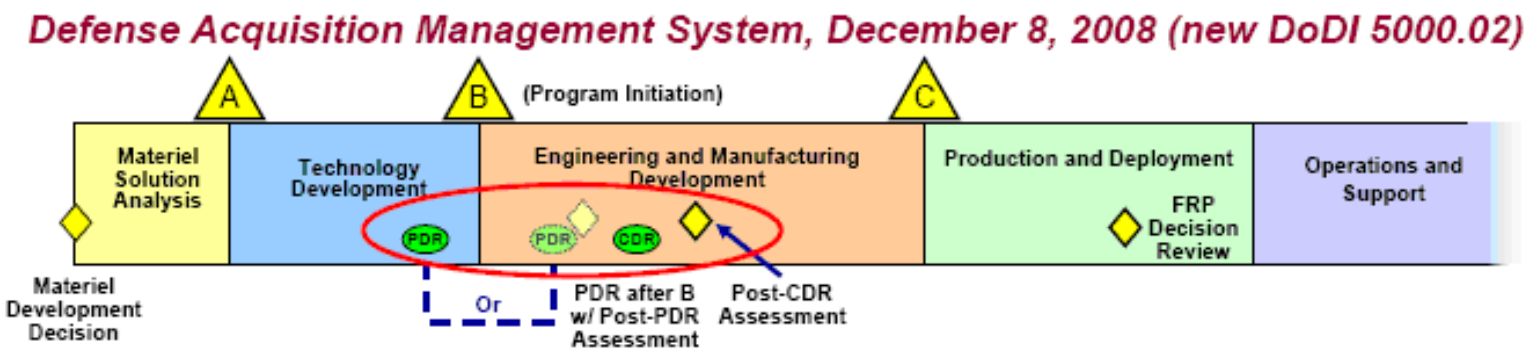
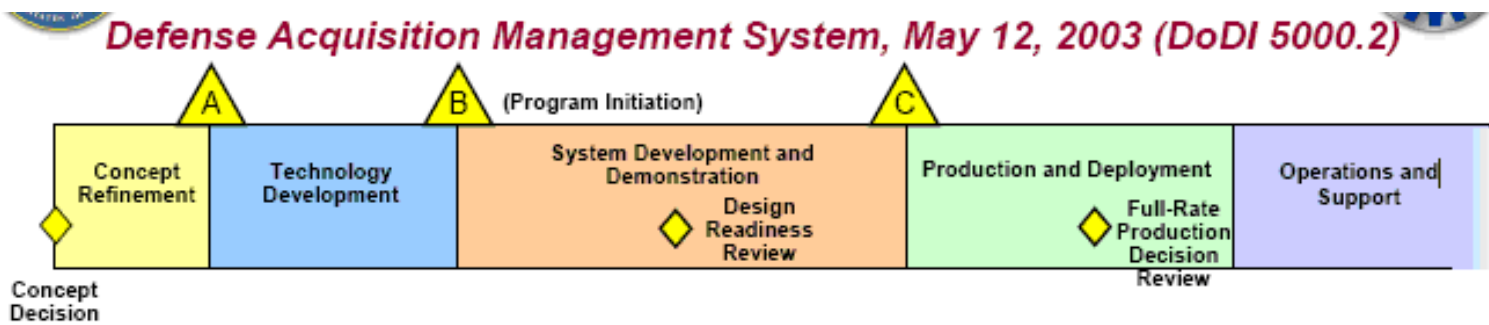
- Schedule
 - “Another year” before start
 - AT&L staff needs to work many issues
- Anticipated changes
 - Policy on Business Capability Lifecycle (BCL) processes
 - Policy, processes, roles, and responsibilities for DCAPE and Deputy Assistant Secretaries for Cost and Economics in the military departments
 - Other WSARA implications.
E.g., creation of
 - Director of Developmental Test and Evaluation
 - Director of Systems Engineering
 - Office of Performance Assessment and Root-Case Analysis
 - NDAA 2011 provisions

BCL Process





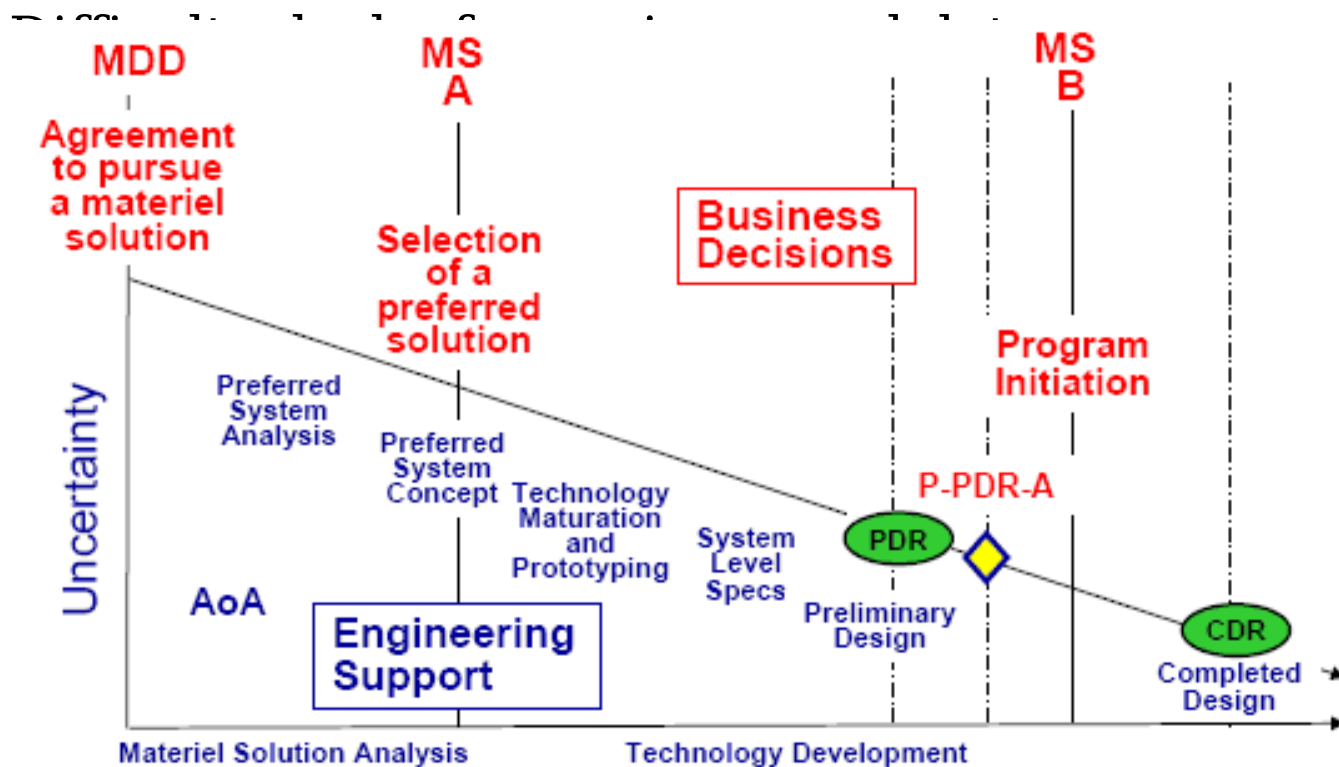
WSARA Impact





WSARA Impact

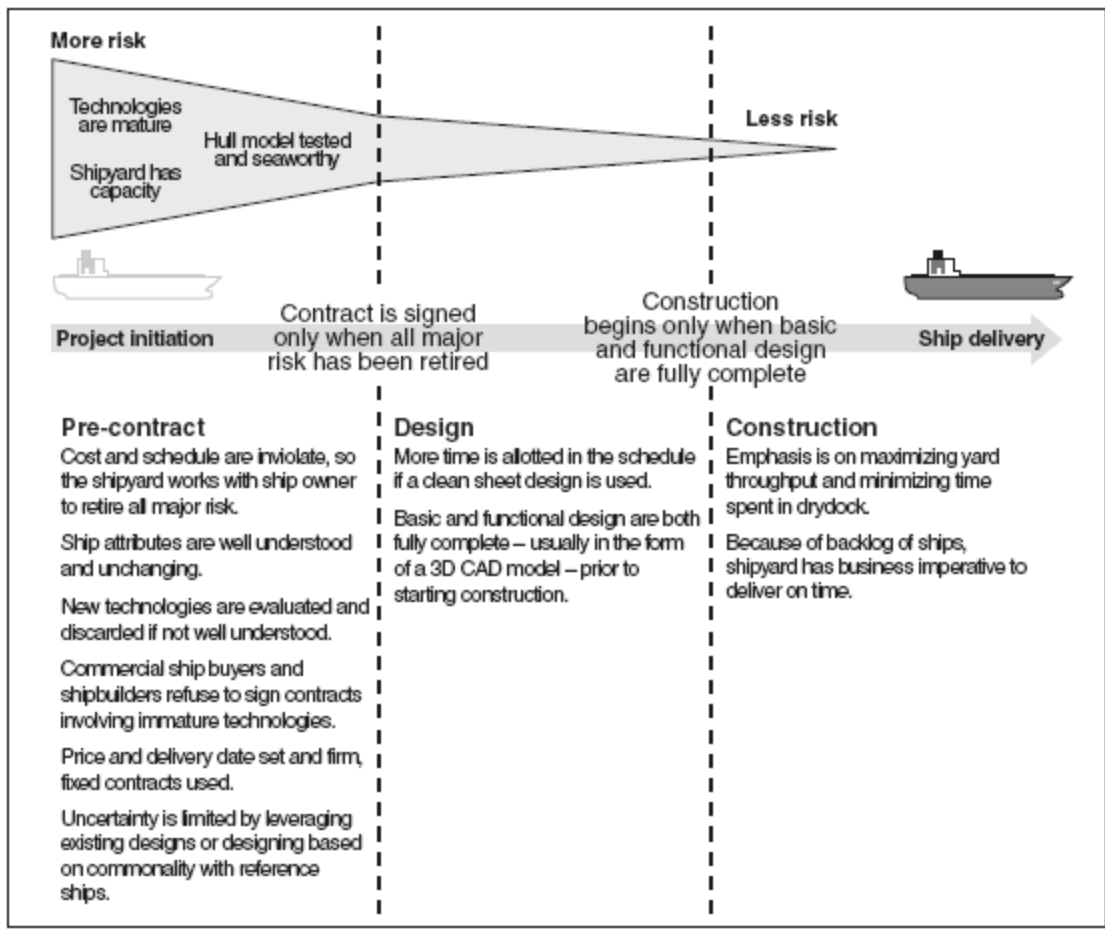
- Attempts to drive risk out of MS B decisions





Planned Update

- Policy changes from GAO audit on shipbuilding (May 2009)
 - In commercial shipbuilding,
 - Agreement before contract signing on:
 - Ship concept
 - Cost
 - Delivery schedule
 - Performance attributes
 - Use of FFP contracts

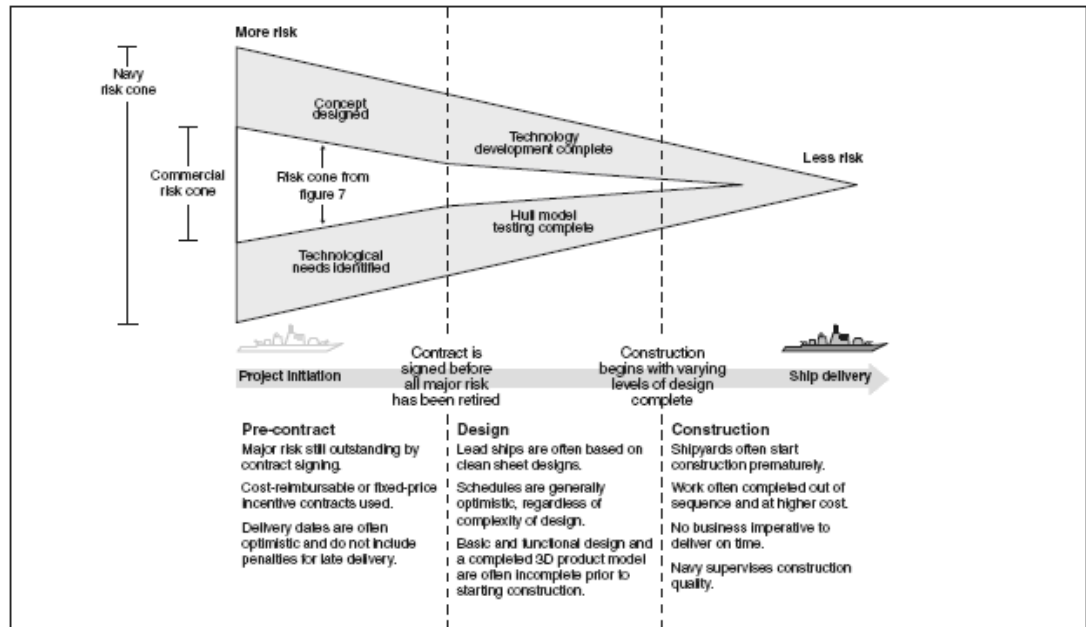
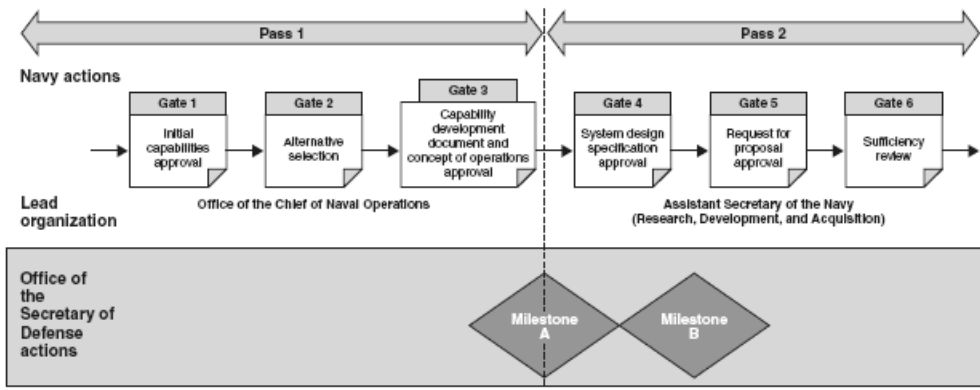


Commercial Construct



Planned Update

- Recommendations
 - Balance requirements, cost, technology by preliminary design review
 - Retire technical risk and close gaps in requirements before contract award for ship design
 - Use prototypes
 - Demonstrate success
 - Stabilize ship design before start of construction
 - Identify steps for using fixed-price contracts for lead-ship design and construction
 - AT&L only partially concurs





DON 5000.2E Status

- Schedule
 - “Remains on-track for 15 FEB 2010 submit to ASN RD&A/VCNO/ACMC for signature”



DON 5000.2E Changes



- **Decrease Volume / Page Count of SECNAVINST 5000.2E**
- **ASN RDA Active Policy (Memo) Scrub (ASN RDA)**
- **C4I For New Construction and Conversion Ships (OPNAVINST 2300.xx) (ASN RDA / N6)**
- **Service Cost Position Requirement (OSD AT&L / ASN FMC)**
- **Independent Cost Assessments for MDAPs (ASN FMC)**
- **Gate Review Process Changes (ASN RDA / DON CIO / N8)**
- **CCA Confirmation Reporting Requirements for ACAT III & Below (DON CIO)**
- **Work Breakdown Structure Standardization (OSD AT&L)**
- **Navy Training Systems Requirements Update (OPNAVINST 1500.76B) (N151)**
- **Key System Attributes in the Acquisition Program Baseline (J8 / OSD AT&L)**
- **Life Cycle Signature Support Plan - Instructions and Template (OSD AT&L / N4)**
- **Probability of Program Success (PoPS) Criteria (ASN RDA)**
- **09 NDAA SEC 815 - Unique Tooling Storage (OSD AT&L) (placeholder)**
- **Business Capability Life Cycle Process (OSD AT&L / BTA) (placeholder)**



DON 5000.2E Changes

- **Manufacturing Readiness Assessments / Levels (DASN ALM & N4) (placeholder)**
- **Integration Readiness Levels (DASN ALM & RDA CHSENG) (placeholder)**
- **Contracting for Open Architecture (DASN ALM & RDA CHSENG)**
- **Independent Logistics Assessment (DASN ALM)**
- **Earned Value Management Updates (ASN RDA / CEVM / NCCA)**
- **Urgent Requirements / Rapid Acquisition Updates (ASN RDA / N8)**
- **Updated OPNAVINST 1500.76B - Naval Training Systems Plan (N125)**
- **Minimizing Use of Ozone Depleting Substances (OSD AT&L / ONR)**
- **Deputy Chief Management Officer Procurement Planning Agreements (OSECNAV) (placeholder)**
- **ForceNet Changes (N6)**
- **Program Management Agreements (DASN ALM)**
- **Program Office Staffing Plans (DACM)**
- **SECNAVINST 5420.188F (DASN ALM) (update vs cancel)**
- **Oversight of DON-Originated IT contracts/procurements (INSIGHT) (DASN C4I)**
- **Designation of Acquisition Sub-Programs (DASN C4I)**



DON Cost Estimating Standard



Process

